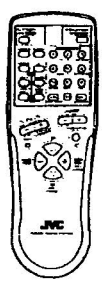
JVC

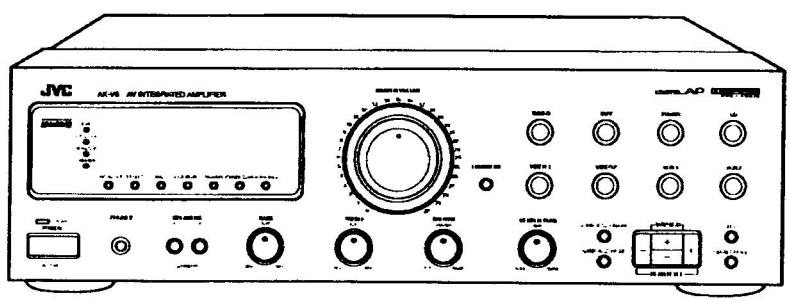
AV INTEGRATED AMPLIFIER

AX-V8BK

Area Suffix

Bs	....	the U.K
EF	....	Continental Europe Except Germany & Italy
EN	....	Nordic Countries
G	.....	Germany
GI	....	Italy
UB	....	Hong Kong
US	....	Singapore
UT	....	Taiwan
U	.....	Universal Except All of Above



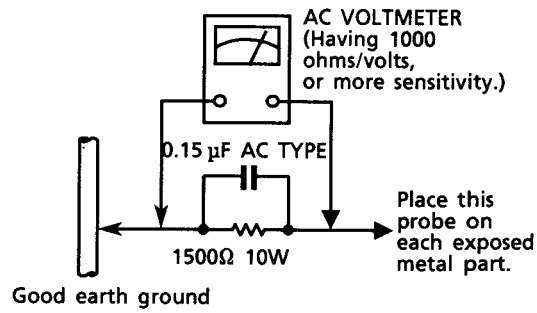


COMPU LINK
Remote
Control Component

No. 20588
July 1996

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute repalcement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, contorl shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10 W resistor paralleled by a 0.15 µF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor.
     Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

Specifications

Amplifier

Output Power	At Stereo operation Front Channels	90 watts per channel, min. RMS, driven into 4 ohms at 1 kHz with no more than 0.7% total harmonic distortion. (IEC268-3/DIN) 60 watts per channel, min. RMS, driven into 8 ohms at 1 kHz with no more than 0.7% total harmonic distortion. (IEC268-3/DIN) 45 watts per channel, min. RMS, driven into 8 ohms, 20 Hz to 20 kHz with no more than 0.06% total harmonic distortion.
	At Surround operation Front Channels	70 watts per channel, min. RMS, driven into 8 ohms at 1 kHz with no more than 0.7% total harmonic distortion.
	Center channel	70 watts, min. RMS, driven into 8 ohms at 1 kHz, with no more than 0.7% total harmonic distortion.
	Rear channels	70 watts, min. RMS, driven into 8 ohms at 1kHz, with no more than 0.7% total harmonic distortion.
Total Harmonic Distortion (8 ohms, 1 kHz)		0.03 %* at 45 watts output (* Measured by JVC Audio Analysis System)
Frequency Response (8 ohms)	PHONO CD, TUNER, TAPE, VCR 1, VCR 2, VIDEO 1, VIDEO 2	20 Hz to 20 kHz (±1 dB) 10 Hz to 50 kHz (±1 dB)
Audio Input Sensitivity/ Impedance (1 kHz)	PHONO CD, TUNER, TAPE, VCR 1, VCR 2, VIDEO 1, VIDEO 2	2.5 mV/47 k ohms 200 mV/47 k ohms
Audio Output Level	TAPE, VCR 1, VCR 2	200 mV
Signal-to-Noise Ratio ('66 IHF/DIN)	PHONO CD, TUNER, TAPE, VCR 1, VCR 2, VIDEO 1, VIDEO 2	75 dB/67 dB 90 dB/69 dB
RIAA Phono Equalization		±0.5 dB (20 Hz to 20 kHz)
LOUDNESS control (Volume Control at –30 dB)		+5 ±2 dB at 100 Hz
Tone Control Range	BASS TREBLE	+8 ±2 dB, –8 ±2 dB (at 100 Hz) +8 ±2 dB, –8 ±2 dB (at 10 kHz)
Video Input Sensitivity/ Impedance	VCR 1, VCR 2, VIDEO 1, VIDEO 2	1 Vp-p/75 ohms
Video Output Level	VCR 1, VCR 2, MONITOR OUT	1 Vp-p (at 1 Vp-p input)
Synchronization		negative
Signal-to-Noise Ratio		45 dB

General

Power Requirements	AC 230V, 50 Hz
Power Consumption	310 watts 5 watts (in standby mode)
Dimensions (W x H x D)	435 x 147 x 359.3 mm (17 3/16 x 5 13/16 x 14 3/16 inches)
Mass	9.0 kg (19.9 lbs)

Designs & specifications are subject to change without notice.

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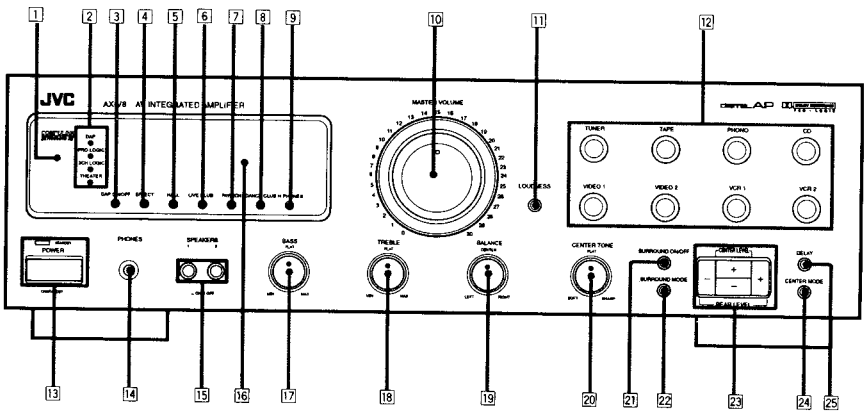
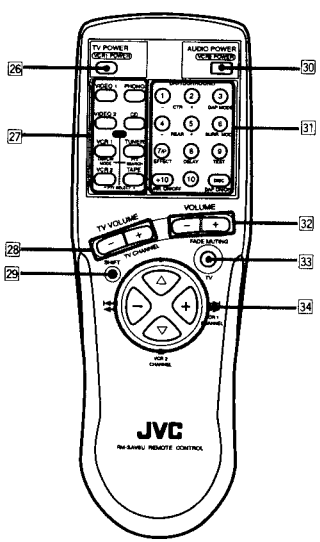
Introduction

Become familiar with the buttons and controls on your AX-V8BK before use.

Switches, Buttons and Controls





Refer to the pages in the parentheses for details.

Front Panel

1. Remote sensor
2. DAP and surround mode indicators (14, 16, 18)
3. DAP ON/OFF button (14, 18)
4. EFFECT button (14, 17)
5. HALL button (14, 18)
6. LIVE CLUB button (14, 18)
7. PAVILION button (14, 18)
8. DANCE CLUB button (14, 18)
9. H.PHONES button (14, 18)
10. MASTER VOLUME control (11)
11. LOUDNESS button (12)
12. Source selecting buttons (TUNER, TAPE, PHONO, CD, VIDEO 1, VIDEO 2, VCR 1, VCR 2) (10)
13. POWER button and STANDBY indicator (10)
14. PHONES jack (12)
15. SPEAKERS 1/2 buttons (11)
16. Display (10)
17. BASS control (11)
18. TREBLE control (11)
19. BALANCE control (11)
20. CENTER TONE control (19)
21. SURROUND ON/OFF button (16, 19)
22. SURROUND MODE button (16, 19)
23. CENTER LEVEL/REAR LEVEL buttons (+/–) (14, 17)
24. CENTER MODE button (16)
25. DELAY button (17)

Remote Control

26. TV POWER button (22)
    * VCR 1 POWER button (22)
27. Source selecting buttons (10)
    * RDS operating buttons (21)
28. TV VOLUME buttons (+/–) (22)
    * TV CHANNEL buttons (+/-) (22)
29. SHIFT button (14, 16, 18, 21, 22)
30. AUDIO POWER button (10)
    * VCR 2 POWER button (22)
31. 10 keys (21)
    * DAP adjustment buttons (14, 18)
    * Surround adjustment buttons (16, 19)
      DISC button (21)
32. VOLUME buttons (+/–) (11)
33. FADE MUTING button (12)
    * TV button (22)
34. Operating buttons for JVC audio/video components (21, 22)
    * VCR 1/VCR 2 CHANNEL buttons (22)

** Some buttons on the remote control have been assigned more than one function. To have the buttons function as marked in green, press the SHIFT button at the same time.*

Getting Started

This section explains how to connect stereo components and speakers to the AX-V8BK, and how to connect the power supply.

Before Installation

General
- Be sure your hands are dry.
- Turn the power off to all components.
- Read the manuals supplied with the components you are going to connect.

Locations
- Install the unit in a location that is level and protected from moisture.
- The temperature around the unit must be between 23° and 104° F (–5° and 40° C).
- Make sure there is good ventilation around the unit. Poor ventilation could cause overheating and damage the unit.

Handling the unit
- Do not insert any metal object into the unit.
- Do not disassemble the unit or remove screws, covers, or cabinet.
- Do not expose the unit to rain or moisture.

Checking the Supplied Accessories

Check to be sure you have all of the following items, which are supplied with the AX-V8BK. The number in the parenthesis indicates quantity of the pieces supplied.

- **Remote Control (1)**
- **Batteries (2)**
- **Mains Plug (Only for the U.K.) (1)**

If anything is missing, contact your dealer immediately.

Connecting the Speakers

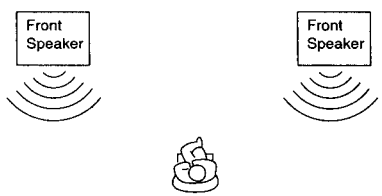
You can connect the following speakers:
- Two sets of front speakers to produce normal stereo sound.
- One set of rear speakers to enjoy the surround effect.
- One center speaker to produce more effective surround effect (to make human voices outstanding).
- One subwoofer speaker to enhance the bass.

About the speaker impedance of the speakers

CAUTION:
When connecting speakers, use speakers with the same SPEAKER IMPEDANCE indicated by the speaker terminals.

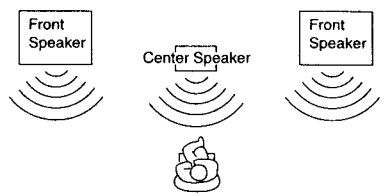
Notes:
- *The required speaker impedance of the front speakers differs depending on whether or not a center and/or rear speakers are connected at the same time. Since there are four possible speaker connections with the AX-V8BK, check which one fits your case and use the speaker with the impedance described below.*
- *The required speaker impedance of the front speakers does not differ depending on whether both the FRONT SPEAKERS ① and FRONT SPEAKERS ② terminals are used or only one of them is used.*

CASE 1 **When you connect only front speakers**



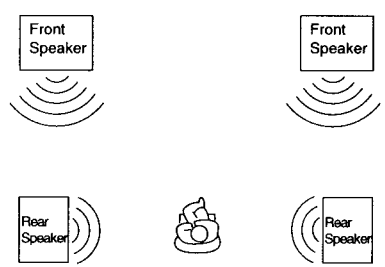
Use front speakers with **4 — 16 ohm** impedance.

CASE 2 **When you connect front speakers and a center speaker**



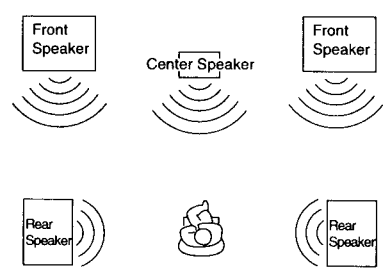
Use the following speakers;
- Front speakers: **8 — 16 ohm** impedance
- Center speaker: **8 — 16 ohm** impedance

CASE 3 **When you connect front and rear speakers**



Use the following speakers;
- Front speakers: **8 — 16 ohm** impedance
- Rear speakers: **8 — 16 ohm** impedance

CASE 4 **When you connect front and rear speakers as well as a center speaker**

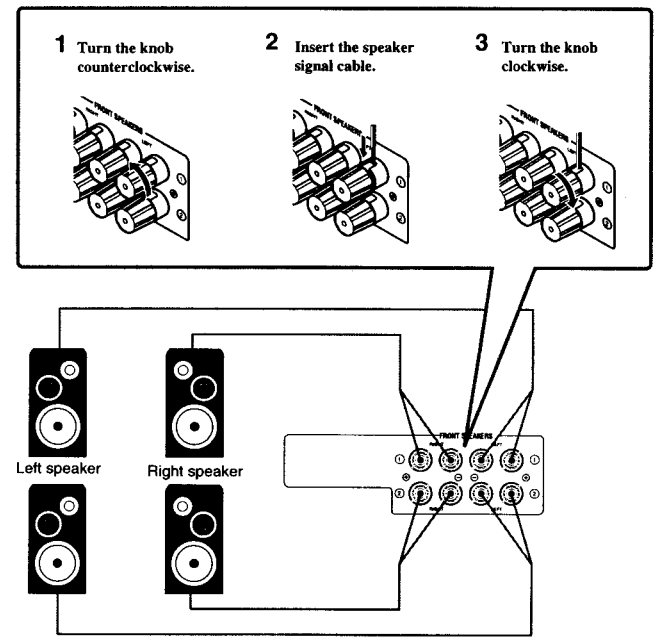


Use the following speakers;
- Front speakers: **8 — 16 ohm** impedance
- Rear speakers: **8 — 16 ohm** impedance
- Center speaker: **8 — 16 ohm** impedance

Connecting the front speakers

Cut, twist and remove the insulation at the end of each speaker signal cable first, and then, connect the front speakers to the FRONT SPEAKERS terminals by using the cables.

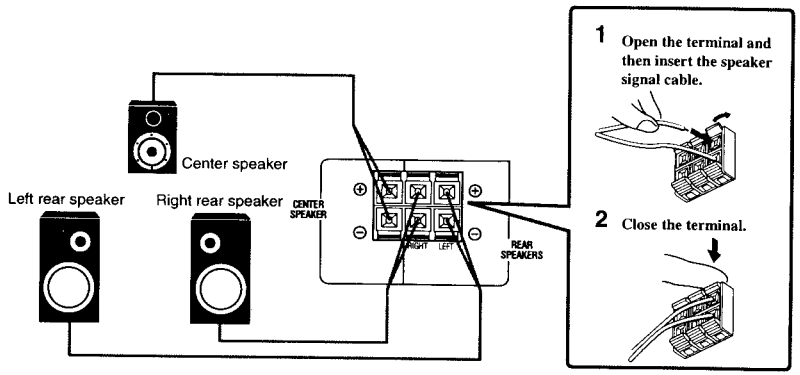
For each speaker, connect the black (–) and red (+) terminals on the rear panel to the black (–) and red (+) terminals marked on the speakers.



Connecting the rear and center speakers

Cut, twist and remove the insulation at the end of each speaker signal cable first, and then, connect rear speakers to the REAR SPEAKERS terminals and a center speaker to the CENTER SPEAKER terminals by using the cables.

For each speaker, connect the black (–) and red (+) terminals on the rear panel to the black (–) and red (+) terminals marked on the speakers.



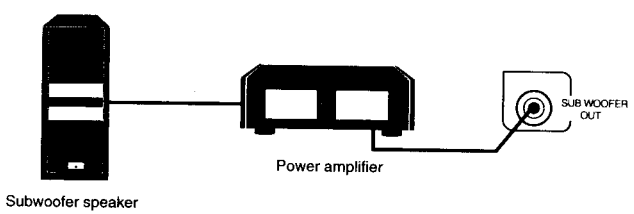
Note:
When you connect rear speakers, make sure that both left and right speakers are connected; otherwise, no sound will come out of the rear speakers.

Enhancing the bass

You can enhance the bass by connecting a subwoofer.
To connect a subwoofer, you also need a power amplifier.

1 **Connect the input jack of the power amplifier to the SUB WOOFER OUT jack on the rear panel.**

2 **Connect a subwoofer speaker to the speaker terminals of the power amplifier.**

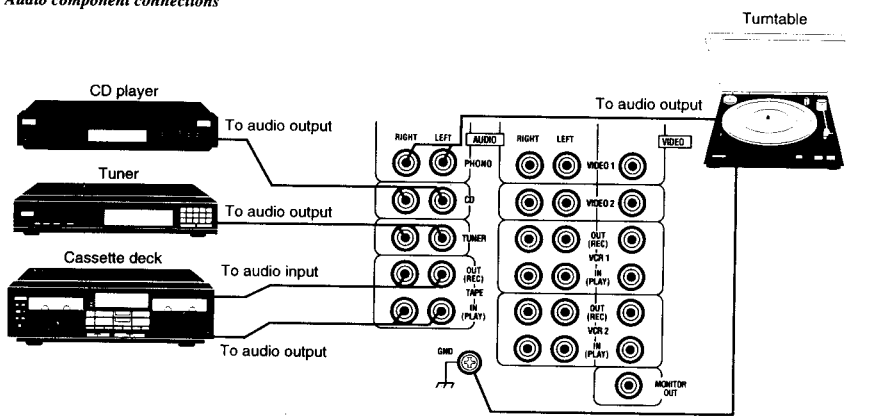


Connecting Audio/Video Components

You can connect the following components to the AX-V8BK using cables with RCA pin plugs.

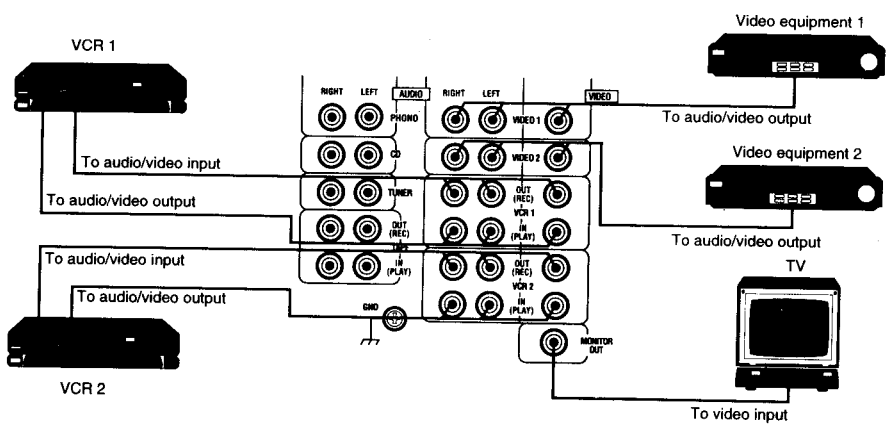
Notes:
- *Both plugs and jacks are color-coded; the red ones are for right audio signals, the white ones for left audio signals, and yellow ones for video signals.*
- *Any turntables incorporating a small-output cartridge such as an MC (moving-coil type) must be connected to this amplifier through a commercial head amplifier or step-up transformer. Direct connection may result in insufficient volume.*

Audio component connections



If a ground cable is provided with your turntable, connect the cable to the screw marked GND on the rear.

Video component connections



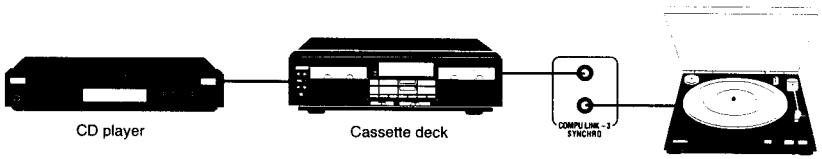
Connecting Audio Components for the COMPU LINK-3 Remote Control System

The COMPU LINK-3 remote control system allows you to control other JVC audio components from the AX-V8BK or vice versa. To use this system, connect your JVC audio components and the AX-V8BK with the cable (monaural mini-plug) supplied with those components.

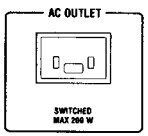
If your audio component has two COMPU LINK-3 SYNCHRO jacks, you can use either one.
If it has only one COMPU LINK-3 SYNCHRO jack, connect it so that it is the last item in the series of components. (For example, the turntable or CD player in the diagram below)

Notes:

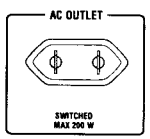
- *The COMPU LINK-3 remote control system is the upgraded version of the COMPU LINK-1 and COMPU LINK-2. Even if your component has the COMPU LINK-1 or COMPU LINK-2 jacks, you can still connect it in the COMPU LINK-3 remote control system, but some functions may not work correctly.*
- *For more information about the COMPU LINK-3 (-1 and -2) remote control system, see page 20.*



Power Supply through the AX-V8BK to the Connected Component



For the U.K.



For Continental Europe

You can use the AC outlet on the rear of the AX-V8BK to supply power to an audio component. This AC outlet is a "switched" outlet. So when the AX-V8BK is off (that is, in standby mode), power is not supplied through this outlet. By turning the AX-V8BK on and off, you can turn the connected component on and off at the same time.

Note:
Do not use the AC outlet on the rear of the AX-V8BK to supply power to a component in the COMPU LINK remote control system; otherwise, the COMPU LINK remote control system may not work correctly.

CAUTION:
Do not plug a component to the AC outlet on the rear if its power consumption is greater than indicated by the AC outlet.

Connecting the Power Cord

Before plugging the AX-V8BK into a wall outlet, make sure that all connections have been made. When the power cord is connected, the STANDBY indicator above the POWER button lights up.

Keep the power cord away from the connecting cables for the TV, VCR, and antenna. The power cord may cause noise or screen interference.

Notes:

- *A small amount of power is always consumed even in standby mode. To switch off the power completely, unplug the power cord from the wall outlet.*
- *If the power cord is unplugged or a power failure occurs, preset settings will be erased in a few days.*

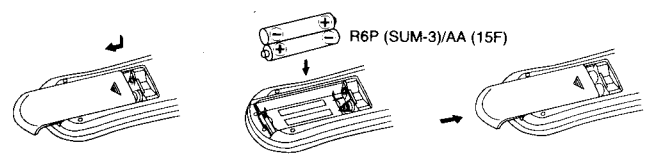
CAUTIONS:

- Do not touch the power cord with wet hands.
- Do not pull on the power cord to unplug the unit. When unplugging the unit, always grasp the plug itself so as not to damage the cord.

Putting Batteries in the Remote Control

Before using the remote control, put two supplied batteries first. When using the remote control, aim the remote control directly at the remote sensor on the AX-V8BK.

1. **On the back of the remote control, press down on the battery cover and slide it out.**
2. **Insert batteries. Make sure to observe the proper polarity: (+) to (+) and (–) to (–).**
3. **Slide the cover in.**



If the range or effectiveness of the remote control decreases, replace the batteries. Use two R6P (SUM-3)/AA (15F) type dry-cell batteries.

CAUTIONS:
Follow these precautions to avoid leaking or cracking cells:

- Place batteries in the remote control so they match the polarity indicated: (+) to (+) and (–) to (–).
- Use the correct type of batteries. Batteries that look similar may differ in voltage.
- Always replace both batteries at the same time.
- Do not expose batteries to heat or flame.

Basic Operations

The following operations are commonly used when you play any sound source.

Turning the Power On and Off

On the front panel

From the remote control

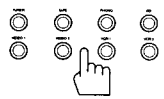
To turn on the power, press the POWER button on the front panel or the AUDIO POWER button on the remote control.
The STANDBY indicator goes off.

To turn off the power, press the POWER button or AUDIO POWER button on the remote control again.
The STANDBY indicator lights up.

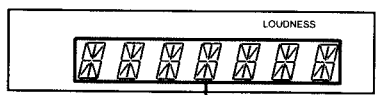
Selecting the Source to Play

You need to select the source to listen or to watch before you start playing any source.

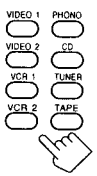
Press the desired source selecting button so that the desired source name appears on the display.



On the front panel



Selected source name appears



From the remote control

TUNER* Listen to the radio.
TAPE* Listen to cassette tapes.
PHONO* Listen to records.
CD* Listen to CDs.
VIDEO 1 Watch the video source through the component connected to the VIDEO 1 jacks.
VIDEO 2 Watch the video source through the component connected to the VIDEO 2 jacks.
VCR 1 Watch the video source through the component connected to the VCR 1 jacks.
VCR 2 Watch the video source through the component connected to the VCR 2 jacks.

Notes:

* *When you press one of the source selecting buttons on the remote control marked above with an asterisk (*), the AX-V8BK automatically turns on.*

• *If you press the one of the video source selecting buttons (VCR 1, VCR 2, VIDEO 1 and VIDEO 2), aiming at the remote sensor of a JVC's TV, the TV's input mode will change to the "VIDEO" position (or the "VIDEO 1" position).*

Selecting different sources for picture and sound

You can watch picture from video equipment while listening to sound from audio equipment.
To listen to the sound from audio equipment while watching the picture from video equipment, press one of the source selecting buttons for the video equipment (VCR 1, VCR 2, VIDEO 1 or VIDEO 2), then press one of the source selecting buttons for the audio equipment (TUNER, TAPE, PHONO or CD).

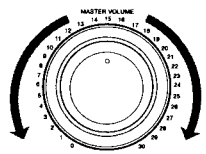
Selecting the Front Speakers

When you have connected two sets of front speakers, you can select which to use. Pressing in the SPEAKERS 1 or SPEAKERS 2 button activates the respective set of speakers.

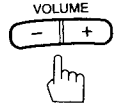
To use the set of the speakers connected to the FRONT SPEAKERS ① terminals, press in the SPEAKERS 1 button (▬ON), and press out the SPEAKERS 2 button (▮OFF).
To use the set of the speakers connected to the FRONT SPEAKERS ② terminals, press in the SPEAKERS 2 button (▬ON), and press out the SPEAKERS 1 button (▮OFF).
To use both sets of the speakers, press in both the SPEAKERS 1 and 2 buttons (▬ON).
To use neither set of the speakers, press out both the SPEAKERS 1 and 2 buttons (▮OFF).

Note:
When only one set of the speakers is connected to either the FRONT SPEAKERS ① or ② terminals, do not press in both SPEAKERS 1 and 2 buttons (▬ON). If you do, no sound comes out of the front speakers.

Adjusting the Volume



On the front panel



From the remote control

On the front panel:

To increase the volume, turn the MASTER VOLUME control clockwise.
To decrease the volume, turn the MASTER VOLUME control counterclockwise.

From the remote control:

To increase the volume, press the VOLUME + button.
To decrease the volume, press the VOLUME – button.

CAUTION:
Always set the MASTER VOLUME control to the minimum before starting any source. If the MASTER VOLUME control is left turned up, the sudden blast of sound energy can permanently damage your hearing and/or ruin your speakers.

Adjusting the Front Speaker Output Balance

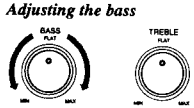
If the sounds you hear from the right and left front speakers are unequal, you can adjust the speaker output balance with the BALANCE control.

To decrease the left channel sound, turn the BALANCE control clockwise.
To decrease the right channel sound, turn the BALANCE control counterclockwise.
When set to the CENTER position, output levels from both speakers are equal.

Adjusting the Tone

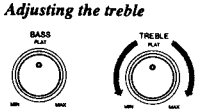
You can increase or decrease the amount of bass and treble reinforcement.

Adjusting the bass



To increase the bass reinforcement, turn the BASS control clockwise.
To decrease the bass reinforcement, turn the BASS control counterclockwise.
When set to the FLAT position, no bass reinforcement is applied.

Adjusting the treble



To increase the treble reinforcement, turn the TREBLE control clockwise.
To decrease the treble reinforcement, turn the TREBLE control counterclockwise.
When set to the FLAT position, no treble reinforcement is applied.

Listening at Low Volume (Loudness)

Human ears are not sensitive to bass at low volume. To compensate for this, the loudness function automatically boosts the bass level as you lower the volume.

To use the loudness function, press the LOUDNESS button on the front panel.
The LOUDNESS indicator lights up on the display.

To turn the function off, press the LOUDNESS button again.
The LOUDNESS indicator goes off.

Muting the Sound (Fade Muting)

You can easily turn down the volume by pressing the FADE MUTING button on the remote control.

To mute the sound through all speakers and headphones connected, press the FADE MUTING button so that the MASTER VOLUME control rotates counterclockwise (volume level turns down).

To cancel the mute mode, press the VOLUME + button (or the VOLUME – button) on the remote control.

Recording a Source

You can record any source playing through the AX-V8BK to the cassette deck connected to the TAPE jacks, and the VCRs connected to the VCR 1 and VCR 2 jacks.
While recording, you can listen to the selected sound source at whatever sound level you like, without affecting the sound levels of the recording.

Note:
The output volume level, tone adjustment, DAP modes and surround modes will not affect the recording.

Listening with Headphones

A standard pair of headphones can be connected to the PHONES jack on the front panel.

To listen only with headphones, press out both the SPEAKERS 1 and 2 buttons (■OFF).

CAUTION:
Be sure to turn down the volume before connecting or putting on headphones, as high volume can damage both the headphones and your hearing.

Using the Digital Surround Processor

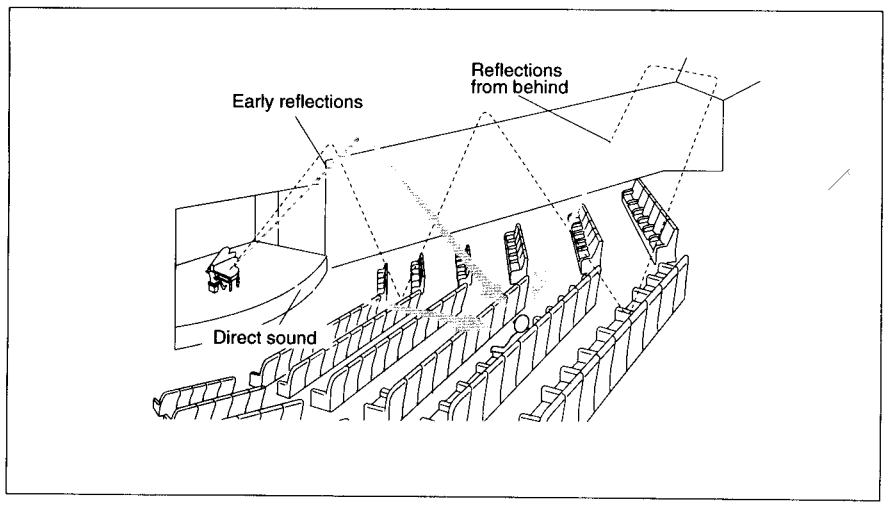
The built-in digital surround processor provides two groups of programs — DAP (Digital Acoustic Processor) modes and surround modes (Dolby Surround* and JVC Theater Surround). You cannot use the DAP mode and surround mode at the same time. When you turn on the DAP mode, the surround mode is turned off (if it has been on), and vice versa.

Notes:
- *The digital surround processor has no effect on monaural sources.*
- *The digital surround processor cannot be used for recording.*

* *Manufactured under license from Dolby Laboratories Licensing Corporation.*
DOLBY, the double-D symbol and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

What can the digital surround processor do?

The sound heard in a concert hall or a movie theater consists of direct sound and indirect sound: early reflections and reflections from behind. The reflected sounds are always delayed by the distances of the ceiling and walls from the listener. These reflections are some of the most important elements of the acoustic surround. So, what the digital surround processor does is to reproduce these elements in your listening room. To use the digital surround processor, you need to connect rear speakers (and a center speaker) as well as the front speakers.

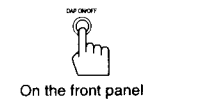


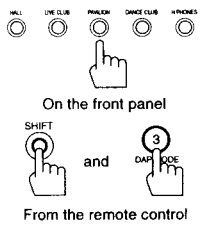
Preparing for the DAP Modes

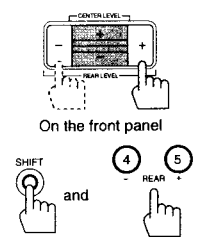
You can use five DAP modes — HALL, LIVE CLUB, PAVILION, DANCE CLUB and H.PHONES (headphones). These modes (except H.PHONES) require rear speakers, but do not require a center speaker to enlarge the sound field. (For speaker arrangement, see speaker arrangement CASE 2 on page 15.) Among the DAP modes, H.PHONES is very special, and no adjustment is required. It can create the same stereo sound as you can listen through the speakers in air while listening to a source using headphones. So, you can feel as if you were not using headphones.

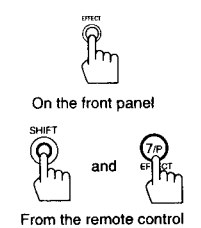
Preparation method for the DAP modes

Once you have set the DAP modes, you can use the same adjustment every time you want to enjoy the DAP mode you want. The AX-V8BK memorizes these adjustments for each mode. **To use the DAP mode, see "Using the DAP modes" on page 18.**



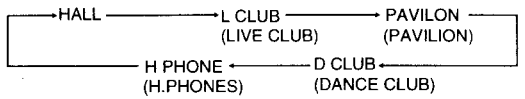






1. **Set the DAP mode on.**
   On the front panel:
   Press the DAP ON/OFF button so that the DAP indicator lights up on the display.
   From the remote control:
   Press the DAP ON/OFF while pressing the SHIFT button so that the DAP indicator lights up on the display.

2. **Select a DAP mode you want.**
   On the front panel:
   Press a DAP mode button you want — HALL, LIVE CLUB, PAVILION, DANCE CLUB or H.PHONES. The selected DAP mode appears on the display.
   From the remote control:
   Press the DAP MODE button repeatedly while pressing the SHIFT button, until the mode you want appears on the display.
   Each time you press the button, the DAP modes change as follows:

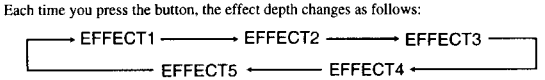


HALL:	Gives clear vocal and the feeling of a concert hall.
LIVE CLUB:	Gives the feeling of a live music club with the low ceiling.
PAVILION:	Gives the spacious feeling of a pavilion with the high ceiling.
DANCE CLUB:	Gives a throbbing bass beat.
H.PHONES:	Gives a spacious stereo effect when listening with headphones.

3. **Set the output levels of the rear speakers.**
   On the front panel:
   Press the REAR LEVEL +/– button repeatedly.
   From the remote control:
   Press the REAR +/– button repeatedly while pressing the SHIFT button .

   Notes:
   - *You can adjust the sound level in 1 dB step within the range of ±10 dB. The sound level of the left and right rear speakers will be the same.*
   - *When you have selected H.PHONES, you cannot set the output levels of the rear speakers.*

4. **Select the effect depth among 5 preset levels.**
   On the front panel:
   Press the EFFECT button repeatedly.
   Each time you press the button, the effect depth changes as follows:
   From the remote control:
   Press the EFFECT button repeatedly while pressing the SHIFT button.
   Each time you press the button, the effect depth changes as follows:



Selecting the higher number makes the effect deeper.

Note:
When you have selected H.PHONES, you cannot select the effect depth.

Preparing for the Surround Modes

You can enjoy two types of surround modes — Dolby Surround and JVC's Theater Surround.

On Dolby Surround

The Dolby Surround has been also developed to reproduce the important elements of the acoustic surround at home.
To watch the soundtracks of video software bearing the mark DOLBY SURROUND which includes the same encoded surround information as found in Dolby Stereo films, the AX-V8BK can provide you with 2 Dolby Surround modes (Dolby Pro Logic and Dolby 3ch Logic).
Dolby Pro Logic: Select this mode when optional rear speakers (and a center speaker) are connected.
Dolby 3ch Logic: Select this mode when a center speaker is connected without rear speakers.

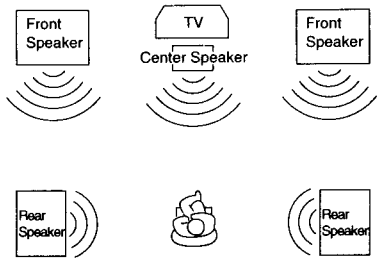
On JVC's Theater (1 and 2) Surround

In order to reproduce a more realistic sound field in your listening room while playing soundtracks of video software bearing the mark DOLBY SURROUND, JVC's Theater Surround has been designed to give you clearer vocals and to create the feeling of being-there. The sound is reproduced through the front speakers, rear speakers, and center speaker.

Speaker arrangements for surround modes

The following illustrations show how to obtain the optimum sound environment for various surround modes. Try to find the speaker direction and location to create the optimum sound field.

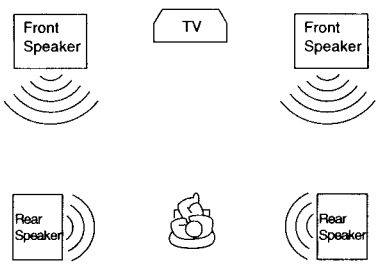
CASE 1 **When you have added a center speaker and rear speakers**



In this case:
1. Select PRO LOGIC, or THEATER 1 or 2.
2. Select NORMAL or WIDE for the center mode.

See the following pages for more details.

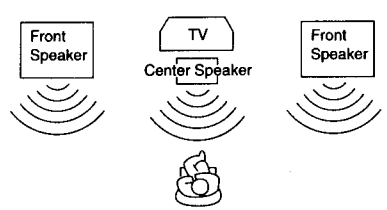
CASE 2 **When you have added rear speakers**



In this case:
1. Select PRO LOGIC, or THEATER 1 or 2.
2. Select PHANTOM for the center mode.

See the following pages for more details.
(You can also use this speaker arrangement for the DAP modes. See pages 14 and 18.)

CASE 3 **When you have added a center speaker (without rear speakers)**



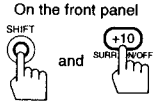
In this case:
1. Select 3CH LOGIC.
2. Select NORMAL or WIDE for the center mode.

See the following pages for more details.

Preparation method for the surround modes

Once you have set the surround modes, you can use the same adjustment every time you want to enjoy the surround you want. The AX-V8BK memorizes surround adjustments for each mode. **To use the surround mode, see "Using the surround modes" on page 19.**

On the front panel



From the remote control

1. Set the surround mode on.

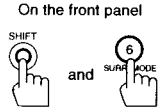
On the front panel:

Press the SURROUND ON/OFF button so that one of the surround mode indicators (PRO LOGIC, 3CH LOGIC or THEATER) lights up on the display.

From the remote control:

Press the SURR. ON/OFF button while pressing the SHIFT button so that one of the surround mode indicators lights up on the display.

On the front panel



From the remote control

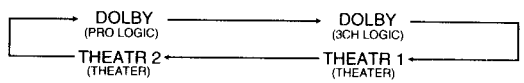
2. Select a surround mode you want.

On the front panel:

Press the SURROUND MODE button repeatedly until the mode you want is selected.
Each time you press the button, the surround modes change as follows:

From the remote control:

Press the SURR. MODE button repeatedly while pressing the SHIFT button, until the mode you want is selected.
Each time you press the button, the surround modes change as follows:

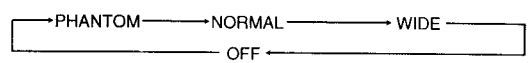


PRO LOGIC: Use this mode to watch a video source with Dolby Surround when you have connected the rear speakers (and a center speaker).
3CH LOGIC: Use this mode to watch a video source with Dolby Surround when you have connected a center speaker and no rear speakers.
THEATER 1: Use this mode to watch a video source with Dolby Surround when you have connected the rear speakers (and a center speaker).
This mode gives you the feeling of a small movie theater with a seating capacity of 100.
THEATER 2: Use this mode to watch a video source with Dolby Surround when you have connected the rear speakers (and a center speaker).
This mode gives you the feeling of a large movie theater with a seating capacity of 1000.

3. Select a center mode.

On the front panel *only*:

Press the CENTER MODE button.
Each time you press the CENTER MODE button, the center modes changes as follows:

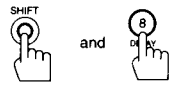


PHANTOM: Select this mode when you don't use a center speaker.
NORMAL: Select this mode when the size of the center speaker is smaller than that of the front speakers.
WIDE: Select this mode when the size of the center speaker is the same as that of the front speakers.
OFF: Select this mode to shut off the output of the center channel signal.

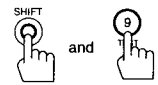
Note:
When you have selected 3CH LOGIC, you cannot select PHANTOM.

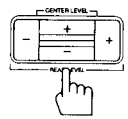
To be continued to the next page

On the front panel

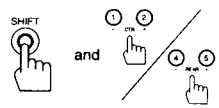


From the remote control

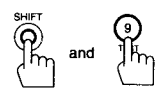




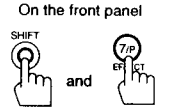
On the front panel



From the remote control



On the front panel



From the remote control

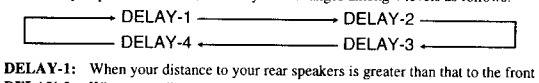
4. Set the delay time of the delayed sound.

On the front panel:

Press the DELAY button repeatedly.
Each time you press the button, the delay time changes among 4 levels as follows:

From the remote control:

Press the DELAY button repeatedly while pressing the SHIFT button.
Each time you press the button, the delay time changes among 4 levels as follows:



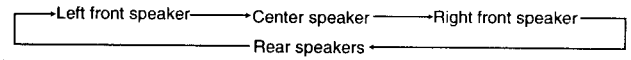
DELAY-1: When your distance to your rear speakers is greater than that to the front speakers.
DELAY-2: When your distance to your rear speakers is almost equal to that to the front speakers.
DELAY-3: When your distance to your rear speakers is a little less than that to the front speakers.
DELAY-4: When your distance to your rear speakers is much less than that to the front speakers.

Note:
When you have selected 3CH LOGIC, you cannot adjust the delay time.

5. Start checking speaker output balance.

From the remote control *only*:

Press the TEST button while pressing the SHIFT button.
When you press the button, "TEST" starts flashing and a test tone comes out of speakers in the following order:



Notes:
- *No test tone comes out of the rear speakers when you have selected 3CH LOGIC.*
- *No test tone comes out of the center speaker when you select PHANTOM or OFF for the center mode.*

6. Set the output levels of the center and the rear speakers.

On the front panel:

Press the CENTER LEVEL +/– button repeatedly to set the sound level of the center speaker.
Press the REAR LEVEL +/– button repeatedly to set the sound level of the rear speakers.

From the remote control:

Press the CTR +/– button repeatedly while pressing the SHIFT button to set the sound level of the center speaker.
Press the REAR +/– button repeatedly while pressing the SHIFT button to set the sound level of the rear speakers.

Notes:
- *You can adjust these levels in 1 dB step within the range of ±10 dB. The sound levels of the left and right rear speakers will be the same.*
- *It is recommended that you adjust the output levels of all the speakers so that their sound levels become identical when they reach your listening point.*
- *You cannot set the sound level of the rear speakers when you have selected 3CH LOGIC.*
- *You cannot set the sound level of the center speaker when you have select PHANTOM or OFF for the center mode.*

7. Finish checking speaker output balance.

From the remote control *only*:

Press the TEST button again while pressing the SHIFT button.
The test tone stops.

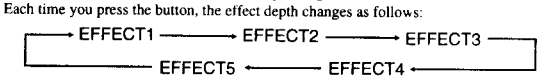
8. Select the effect depth among 5 preset levels only for JVC's Theater Surround.

On the front panel:

Press the EFFECT button repeatedly.
Each time you press the button, the effect depth changes as follows:

From the remote control:

Press the EFFECT button repeatedly while pressing the SHIFT button.
Each time you press the button, the effect depth changes as follows:

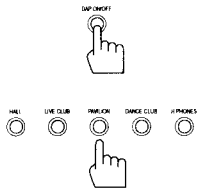


Selecting the higher number makes the effect deeper.

Note:
When you have selected Dolby Surround modes (PRO LOGIC and 3CH LOGIC), you cannot select the effect depth.

Enjoying the DAP Modes and Surround Modes

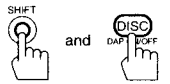
Using the DAP modes



On the front panel:

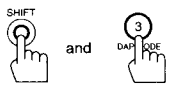
1. **Press the DAP ON/OFF button so that the DAP indicator lights up on the display.**
   The DAP mode previously selected comes on.
2. **Press a DAP mode button you want — HALL, LIVE CLUB, PAVILION, DANCE CLUB or H.PHONES.**
3. **Play a sound source.**

To cancel the DAP mode, press the DAP ON/OFF button again.

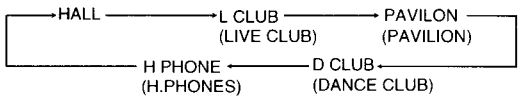


From the remote control:

1. **Press the DAP ON/OFF while pressing the SHIFT button so that the DAP indicator lights up on the display.**
   The DAP mode previously selected comes on.



2. **Press the DAP MODE button repeatedly while pressing the SHIFT button, until the mode you want appears on the display.**
   Each time you press the button, the DAP modes change as follows:



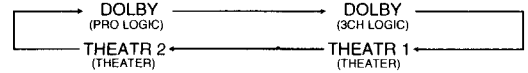
3. **Play a sound source.**

To cancel the DAP mode, press the DAP ON/OFF button again while pressing the SHIFT button.

Using the surround modes

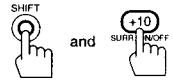
On the front panel:

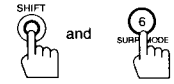
1. **Press the SURROUND ON/OFF button so that one of the surround mode indicators lights up on the display.**
   The surround mode previously selected comes on.
2. **Press the SURROUND MODE button repeatedly until the surround mode you want is selected.**
   Each time you press the button, the display changes to show the following:



3. **Play a sound source which was processed with Dolby Surround and is labeled with DOLBY SURROUND mark.**

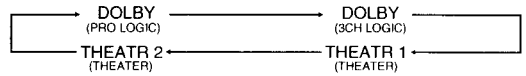
To cancel the surround mode, press the SURROUND ON/OFF button again.





From the remote control:

1. **Press the SURR. ON/OFF button while pressing the SHIFT button so that one of the surround mode indicator lights up on the display.**
   The surround mode previously selected comes on.
2. **Press the SURR. MODE button repeatedly while pressing the SHIFT button until the surround mode you want is selected.**
   Each time you press the button, the display changes to show the following:



3. **Play a sound source which was processed with Dolby Surround and is labeled with DOLBY SURROUND mark.**

To cancel the surround mode, press the SURR. ON/OFF button again while pressing the SHIFT button.

To make dialogues in movies softer or clearer

By using the CENTER TONE control you can adjust the level of mid-frequency range, which the human voice is mostly made up of.

To make dialogues clearer, turn the CENTER TONE control toward SHARP.
To make them softer, turn the CENTER TONE control toward SOFT.
When set to the FLAT position, no adjustment is applied.

Note:
The CENTER TONE control can be used only for the surround modes; however, it cannot be used when sounds do not come out of the center speaker.

COMPU LINK Remote Control System

COMPU LINK Remote Control System

The COMPU LINK remote control system allows you to operate JVC audio components through the remote sensor on the AX-V8BK.
To use this remote control system, you need to connect JVC audio components through the COMPU LINK-3 SYNCHRO jacks (see page 8) in addition to the connections using cables with RCA pin plugs (see page 7).
This remote control system allows you to use four functions listed below.

■ Remote Control through the Remote Sensor on the AX-V8BK

You can control all audio components through the remote sensor on the AX-V8BK using this remote control. For details, see page 21.

Note:
Aim the remote control directly at the remote sensor on the AX-V8BK.

■ Automatic Source Selection

When you press the play button on a connected component or on its own remote control, the AX-V8BK automatically turns on and changes the source to the component. On the other hand, if you select a new source on the AX-V8BK or the remote control, the selected component begins playing immediately.
In both cases, the previously selected source continues playing without sound for a few seconds.

■ Automatic Power On/Off (only possible with the COMPU LINK-3 connection)

The audio components (tuner, CD player and cassette deck) connected to the AX-V8BK automatically turn on and off along with the AX-V8BK.
When you turn on the AX-V8BK, one of the connected component will turn on automatically, depending on which component has been previously selected.
When you turn off the AX-V8BK, these components connected will turn off.

■ Synchronized Recording

Synchronized recording means the cassette deck starts recording as soon as a CD or a record begins playing.

To use synchronized recording, follow these steps:

1 **Put a tape in the cassette deck, and a disc in the CD player (or a record on the turntable).**
2 **Press the record (●) button and the pause (II) button on the cassette deck at the same time.**
This puts the cassette deck into recording pause.

Note:
If you do not press the record (●) button and pause (II) button at the same time, synchronized recording will not operate.

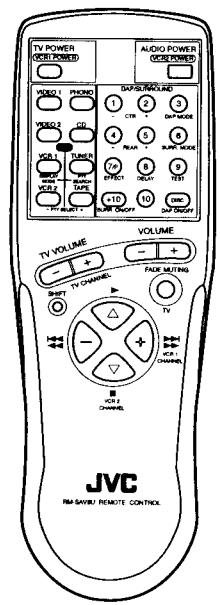
3 **Press the play (►) button on the CD player or on the turntable.**
The source changes on the AX-V8BK, and as soon as play starts, the cassette deck starts recording.
When the play ends, the cassette deck enters recording pause, and stops about 4 seconds later.

Notes:
- *During synchronized recording, the selected source cannot be changed.*
- *If your CD player is playing in program mode, a 4-second blank is recorded between tracks so that the music scan feature of your cassette deck can be used on the recorded tape.*
- *If the power of any component is shut off during synchronized recording, the COMPU LINK remote control system may not operate properly. In this case, you must start again from the beginning.*
- *Refer also to the manuals supplied with your audio components.*

Using the Remote Control

You can operate JVC's audio and video components with the AX-V8BK's remote control, since control signals for JVC components are preset in the remote control.
To operate these components with the remote control, first select a source with the source selecting buttons on the remote control. Then, operate that source using the remote control.

Note:
If you choose a source on the front panel, the remote control will not operate that source. To operate a source with the remote control, the source must be selected using buttons on the remote control.



IMPORTANT:
To operate JVC's audio components using this remote control:
- You need to connect JVC audio components through the COMPU LINK-3 SYNCHRO jacks (see page 8) in addition to the connections using cables with RCA pin plugs (see page 7).
- Aim the remote control directly at the remote sensor on the AX-V8BK.

Tuner

After pressing the TUNER button, you can perform the following operations on a tuner:

1 — 10, +10
Selects a preset channel number directly.
To select channel number 5, press 5. For channel number 15, press +10, then 5. For channel number 20, press +10, then 10.

RDS (Radio Data System) operating buttons (always used while the SHIFT button is pressed):

PTY SEARCH
Starts PTY (programme type) Search.

PTY SELECT +/–
Select program type you want.

DISPLAY MODE
Changes the RDS information shown on the tuner's display.

CD player

After pressing the CD button, you can perform the following operations on a CD player:

► Starts playing.
|◄◄ Returns to the beginning of the current (or previous) track.
►►| Skips to the beginning of the next track
■ Stops playing.

1 — 10, +10
Selects a track number directly.
To select track number 5, press 5. For track number 15, press +10, then 5. For track number 20, press +10, then 10.

CD player-changer

After pressing the DISC button, you can perform the following operations on a CD player-changer:

1 — 6, 7/P
Select the number of a disc installed in a CD player-changer.
Then continue to operate the CD player-changer as described above.

Note:
If you have the CD player-changer XL-MC100C and XL-MC100M, 1 — 6 buttons function as the DISC SKIP button.
- *Press 2, 4, or 6 to skip to the next disc.*
- *Press 1, 3, or 5 to skip back to the previous disc.*

Cassette deck

After pressing the TAPE button, you can perform the following operations on a cassette deck:

► Starts playback.
◄◄ Fast winds the tape from right to left.
►► Fast winds the tape from left to right.
■ Stops operation.

IMPORTANT:
To operate JVC's video components using this remote control:
- Aim the remote control directly at the remote sensor on the VCR or TV, not on the AX-V8BK.

VCRs

Some of JVC's VCRs can accept two types of the control signals — remote control code "A" and "B". Pressing the VCR 1 button sets this remote control to operate a VCR with remote control code "A"; on the other hand, pressing the VCR 2 button sets this remote control to operate a VCR with remote control code "B". Before using this remote control, make sure that the remote control code of the VCR connected to the VCR 1 jacks is set to code "A" and that of the VCR connected to the VCR 2 jacks is set to code "B". For setting the remote control code of the VCR, refer to the manuals supplied with your VCR.

After pressing the VCR 1 button or the VCR 2 button, you can perform the following operations on a VCR with the respective remote control code.

- ► Starts playback.
- ◄◄ Rewinds a video tape.
- ►► Fast winds a video tape.
- ■ Stops operation.

You can always perform the following on the VCR with remote control code "A":

VCR 1 CHANNEL (+/–)
Changes the TV channels on the VCR (always used while the SHIFT button is pressed).

VCR 1 POWER
Turn on or off the VCR (always used while the SHIFT button is pressed).

You can always perform the following on the VCR with remote control code "B":

VCR 2 CHANNEL (▲ / ▼)
Changes the TV channels on the VCR (always used while the SHIFT button is pressed).

VCR 2 POWER
Turn on or off the VCR (always used while the SHIFT button is pressed).

Note:
If you press the one of the video source selecting buttons (VCR 1, VCR 2, VIDEO 1 and VIDEO 2), aiming at the remote sensor of a JVC's TV, the TV's input mode will change to the "VIDEO" position (or the "VIDEO 1" position).

TV

You can always perform the following on a TV:

TV Changes the TV's input mode to the "TV" position (always used while the SHIFT button is pressed).

TV VOLUME +/–
Adjust the TV volume.

TV CHANNEL +/–
Changes the TV channels (always used while the SHIFT button is pressed).

TV POWER
Turn on or off the TV.

Troubleshooting

Use this chart to help you solve daily operational problems. If there is any problem you cannot solve, contact your JVC service center.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The display does not light up.	The power cord is not plugged in.	Plug the power cord into an AC outlet.
No sound from speakers.	Speaker signal cables are not connected.	Check speaker wiring and reconnect if necessary.
	The SPEAKERS buttons are not set correctly.	Press the SPEAKERS buttons in or out correctly.
	An incorrect source is selected.	Select the correct source.
Sound from one speaker only.	Speaker signal cables are not connected properly.	Check speaker wiring and reconnect if necessary.
	The BALANCE control is set to one extreme.	Adjust the BALANCE control properly.
Howling during record playing.	Your turntable is too close to speakers.	Move speakers away from the turntable.
Remote control does not work.	There is an obstruction in front of the remote sensor on the AX-V8BK.	Remove the obstruction.
	Batteries are weak.	Replace batteries.